Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method of selecting a lowest cost selectable implementation from a plurality of selectable implementations for a component of a computer program, the method comprising steps of:

instrumenting said component to ~~gather cost-related~~ compute cost information for each of the implementations during at least a partial run of said computer program;

said instrumentation computing a cost for each selectable implementation for at least one use of the component during said partial run, said computation being based on the current state of the run; and

based on the cost, selecting at runtime one of the plurality of selectable implementations for a subsequent at least partial run of the computer program, said one of the plurality of selectable implementations selected being the one with the lowest cost.

~~using the cost-related information to estimate a cost for using each of a plurality of explicitly selectable implementations for the component in running the program, the cost-related information comprising a kind of use that is made of the candidate component or corresponding decisions made for other components that interact with said component; and~~

~~based on the estimate of the cost, selecting, at runtime, one of the plurality of the selectable implementations for a subsequent at least partial run of the computer program, the one of the plurality of explicitly selectable implementations selected being an implementation with the lowest cost~~.

2. (Canceled)

3. (Previously presented) The method as set forth in claim 1, wherein the selecting step is carried

out by an other component operable as a controller.

4. (Previously presented) The method as set forth in claim 1, wherein the selecting step is carried out by an application program.

5. (currently amended) A computer readable storage medium including computer instructions for carrying out a method of minimizing the cost of using a component of a computer program, the method comprising steps of:

instrumenting the component to ~~gather cost related~~ compute cost information during at least a partial run of said program;

said instrumentation computing a cost for each selectable implementation for at least one use of the component during said partial run, said computation being based on the current state of the run; and

based on the cost, selecting at runtime one of the plurality of selectable implementations for a subsequent at least partial run of the computer program, said one of the plurality of selectable implementations selected being the one with the lowest cost.

~~using the cost-related information to estimate a cost for using each of a plurality of explicitly selectable implementations in running the program, the cost-related information comprising a kind of use that is made of the component or corresponding decisions made for other components that interact with said component; and~~

~~based on the costs estimated, selecting, at runtime, one of the explicitly selectable implementations for a subsequent at least partial run of the program.~~

6. (Previously presented) The computer readable medium as set forth in claim 5, wherein a default implementation is used during the at least partial run.

7. (Original) The computer readable medium as set forth in claim 5, wherein the selecting step is carried out by an other component operable as a controller.

8. (Previously presented) The computer readable medium as set forth in claim 5, wherein the selecting step is carried out by an application program.

9. (Currently amended) A computer system comprising a processor for running a method ~~plurality of components which interact during running thereof, at least one of the components~~ comprising:

~~a)~~ receiving a plurality of explicitly selectable alternative implementations of components of a computer program from a plurality of selectable implementations;

~~b) a common interface and semantics for~~ receiving messages from another one of the components and sending messages thereto;

~~c) an instrumentation for gathering cost related~~ computing cost information during at least a partial run of the computer program, the cost-related information comprising a kind of use that is made of the component or corresponding decisions made for other components that interact with said component;

said instrumentation computing a cost for each selectable implementation for at least one use of the component during said partial run, said computation being based on the current state of the run; and

based on the cost, selecting at runtime one of the plurality of selectable implementations for a subsequent at least partial run of the computer program, said one of the plurality of selectable implementations selected being the one with the lowest cost.

~~d) a cost estimator for using the cost-related information to estimate a cost for using each of the explicit selectable alternative implementations; and~~

~~e) a selector for choosing, at runtime, one of the alternative implementations in response to a message received at the interface from one of an application program and another one of the components.~~

10. (Previously presented) The computer system as set forth in claim 9, wherein one of the alternative implementations comprises a default implementation which is operational before operation of the selector.

11. (Previously presented) The computer system as set forth in claim 9, the selector being operable to choose an alternative implementation based upon a cost measurement by the instrumentation.

12. (Previously presented) The method of claim 1 further comprising a step of providing the component with the plurality of explicitly selectable implementations which share a common component interface and semantics.

13. (Previously presented) The medium of claim 5 further comprising instructions for providing the component with the plurality of explicitly selectable implementations which share a common component interface and semantics.